By-Donoghue, Mildred R.

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Research studies from different areas of the country are cited to support a favorable view of the effects of FLES instruction and to identify the most effective FLES instructional arrangements. Effects of FLES instruction on language achievement in elementary and high school and on general achievement in elementary school are noted. A study on mental maturity in FLES and non-FLES young children is also cited. Such instructional arrangements as time-spacing during the week, sequence of oral skills, physical involvement, and effectiveness of the classroom teacher are considered. An annotated bibliography is included. (AF)

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## FOREIGN LANGUAGES IN THE ELEMENTARY SCHOOL: EFFECTS AND INSTRUCTIONAL ARRANGEMENTS ACCORDING TO RESEARCH

Mildred R. Donoghue California State College, Fullerton

The opportunity for children in the United States to learn a second modern language during their elementary school years has never appeared brighter. Enrollments and enthusiasm, methods and materials—all have been developing steadily during the past decade: and FLES is presently offered by approximately 95 percent of the large public school systems (with 100,000 students or more), 75 percent of the average systems (with 50,000 to 99,999 students), 60 percent of the low average systems (with 25,000 to 49,999 students), and by 50 percent of the small systems (with 12,000 to 24,999 students) reporting to the NEA Research Bureau in December 1967.1

The effects of such elementary school instruction continue to be favorable.<sup>2</sup> More than a half-dozen research studies published since 1965 testify that the addition of a second language to the curriculum for the young child has helped his general school achievement, linguistic progress, high-school language work, and mental maturity. Furthermore, instructional arrangements for FLES, which have been endorsed by an equal number of other researchers during the same period, can help teachers and administrators insure that these positive results will continue and increase.

### EFFECTS OF FLES INSTRUCTION

Academic Achievement in the Elementary School

Foreign language learning among young children does not detract from their general achievement, while it simultaneously promotes their linguistic progress.

A two-year study of 120 intermediate-grade children studying Spanish in Minnesota revealed that the addition of a second language to the school day did not interfere with their achievement in reading vocabulary, reading comprehension, language skills, or arithmetic understanding as measured by the <u>lowa</u> Test of Basic Skills administered at the beginning and end of each school year.<sup>3</sup> Moreover, the FLES pupils made significant progress in oral communication in the Spanish language, according to the Common Concepts of Foreign Language Test administered at the end of each year.

Primary children participated in a one-year study at a campus school in New York and proved, according to scores on the California Achievement Test and the California Reading Test, that there was no significant difference in general school achievement or in reading proficiency between the children who had studied French daily and those who had not.<sup>4</sup> Results showed no non-chance difference between the group instructed in a foreign language and the group exposed to a noncognitive activity; so, even if interference did occur between the oral code of the second language system and the written code of the first language system, it did not detract from the pupils' overall functioning in reading, or in general achievement as measured by the criterion tests.

A three-year study in Florida involved children who had been in the primary grades at the inception of the project and were subsequently promoted.<sup>5</sup> The



Stanford Achievement Tests in language arts and arithmetic which were conducted in the fall of each school year showed that there was no significant difference in the areas of paragraph meaning, word meaning, spelling, arithmetic reasoning, or arithmetic computation between the FLES pupils and the non-FLES pupils. The second larguage was either Spanish or English, and the children made good progress toward learning that language.

## Language Achievement in High School

Foreign language learning in the elementary school results in broader and more comprehensive achievement in high-school language study.

Among sixty-two pupils in three high schools in Buffalo, New York, who had reached the intermediate level of French, there were some who had studied French for four years beginning in the fifth grade. These pupils were designated as the FLES or experimental group. Others—the non-FLES or control group—had started French only one year earlier. The two groups were matched in intelligence, achievement, sex, and instruction received; and both were given the Modern Language Association Cooperative French Test battery (Level LA) at the end of the intermediate course. On all four tests the FLES group received a higher mean score than the control group, with differences in performance significant at the .05 level or beyond in listening, speaking, and writing.6 Furthermore, although the girls in both groups achieved greater mean scores on all four tests than the boys, the margin of difference was narrower in the experimental group, indicating that the FLES experience had been especially valuable for the boys.

In the previous study the experimental group had had four years of language work prior to high school. In two surveys made in a high school in Lexington, Massachusetts, ex-FLES students had studied French for six years, beginning in the third grade. Among thirty-two students who took the MLA Cooperative French Test battery (Level M) during the spring term of the eleventh grade, the FLES group scored significantly higher on all four tests than the non-FLES group which had begun French in the ninth grade. The differences in performance were significant beyond the .001 level and the median raw scores of the FLES group on all four tests exceeded the median scores for the national norms. Among fifty-four students who took the identical test battery during the spring semester of the eleventh grade, the FLES group performed significantly better on all four tests than the group that had started language study in the seventh grade. 8 Moreover, although both groups were taught by the same instructor, the differences between them were in favor of the FLES group, suggesting to the researchers that it was the training program alone that accounted for the difference.

Both French and Spanish have been offered for more than a decade to the young children in the public schools of Fairfield, Connecticut, beginning in the third grade. A three-year study was made of the high-school language progress of the ex-FLES pupils who had studied a language continuously since the elementary school and of the more recent arrivals to the city's public schools who had begun the study of French or Spanish in high school. Scores on the MLA Cooperative Foreign Language Test battery (forms LA, MA, or MB) administered to 913 students showed that in listening and speaking skills high school sophomores who have studied a second language continuously from the third



grade can equal or exceed twelfth-graders who began language work in high school; and in reading and writing skills, high school students from a FLES group can equal students one grade ahead of them who began language study in high school.<sup>9</sup>

## **Mental Maturity**

Foreign language learning among young children results in a gain in mental maturity significantly above that realized for the same period by non-FLES pupils.

Among the 123 fourth- and sixth-graders attending four public schools in Albuquerque, New Mexico, an experimental group was given intensive second language instruction for a period of six months, while the control group was not. 10 Both groups received the California Test of Mental Maturity at the beginning and end of the study; the experimental group made a significantly greater gain than the control group, with the sixth-grade members making even greater gains than the younger, fourth-grade ones.

## ARRANGEMENTS FOR FLES INSTRUCTION

Time-Spacing During the School Week

Short, daily (or near-daily) sessions of foreign language instruction are more effective with beginning pupils in the elementary school than longer, less frequent sessions.

In a one-year study of three classes of third- and fourth-graders in the public schools of Pennsylvania, all the children received one hour of instruction weekly. Teachers, materials, and techniques were equated and none of the children had had previous language training. One group, however, studied French daily for twelve minutes while the other group studied it semi-weekly for thirty minutes. Tests were administered three times during the year and focused on listening and speaking skills; whenever significant differences occurred between the two groups, the differences favored the group that studied every day. The researcher concluded that daily twelve-minute periods of French are at least as good but probably better than less frequent half-hour sessions.11

One hour was also allotted weekly for foreign language instruction in a second experiment, which involved 137 beginners in a California elementary school. 12 One group had four fifteen-minute sessions weekly while the other had two thirty-minute sessions; both, however, included members from all three grade levels and had the same materials and teacher. After one semester of Spanish, it was concluded that while two longer periods a week were as effective as four shorter ones in teaching aural comprehension, they were not as effective in teaching pronunciation and intonation, with all findings based on differences between groups significant at less than the .05 level. Furthermore, none of the three grade levels (primary, intermediate, or junior high) was more amenable than any other grade level to either of the two time-spacing arrangements for beginning FLES.

#### Sequence of Oral Skills

In second language learning, training in speaking should precede training in listening, although in first language learning, hearing generally precedes speech. One explanation for this is that speaking training in FLES produces some de-



gree of listening proficiency; consequently the groups that receive speaking training first can begin listening training with some part of the listening task already learned.

Instruction in beginning French was presented in a Los Angeles public school to 108 primary children who were divided into four groups. The first received massed training in speaking followed by massed training in listening; the second received massed training in listening followed by massed training in speaking; the third received listening and speaking lessons concurrently, with speaking training first in each lesson; and the fourth group received concurrent lessons, with listening training first in each lesson. At both the end of the ten-day instructional period as well as at the end of an additional two weeks, the speaking-first group of first, second, and third grade children consistently excelled the listening-first group of children from the same grades on a listening comprehension test. This advantage, according to the researcher, may have resulted from an increased ability to discriminate among stimuli, due to articulatory and verbal labeling and to reversibility of stimulus and response terms.

However, since it was suspected that recency might have affected the performance of the speaking-first group, the previous study was replicated. Still the superiority of the speaking-first group was maintained, both after one month and after three months. Consequently, it was the sequence of instruction, not recency, which was responsible for the results.

## Significance of Physical Involvement

Listening comprehension is facilitated by physical involvement in the learning situation.

In one experiment on sixth-graders studying Russian, sixty-four children were divided into two groups that had been matched by scores on the <u>California Test of Mental Maturity</u>, the <u>California Achievement Test</u>, and by classroom performance. The experimental group listened to the teacher and acted along with him, while the control group listened and watched the teacher perform. On the retention tests, the experimental group acted individually while the control group wrote English translations. The results, according to the researcher, were spectacular differences in retention favoring the children who had applied physical response, with <u>t</u>'s significant beyond the .01 level no matter what the complexity of the Russian structure.

In another experiment, twenty boys and girls in the third grade were divided into two equated groups in order to develop language understandings. One group used active games but the other used passive workbook exercises, with the result that four-fifths of the children in the active game group had a greater percent gain than their counterparts in the workbook group. While it was concluded that third grade children can develop language comprehension through either medium, the medium of active games produced greater changes. 16

#### Effectiveness of the Classroom Teacher

Children taught FLES by their classroom teacher with the help of new media can acquire a listening comprehension and reading comprehension of the second language comparable to those achieved by pupils taught by a specialist.

A three-year study of four classrooms of intermediate grade children in the public schools of Illinois included a control group that learned Spanish from a



language specialist and an experimental group that learned it from classroom teachers with the use of tapes and weekly telecasts. <sup>17</sup> The boys and girls in the experimental group acquired a listening comprehension and reading comprehension of the language which was comparable to those acquired by the pupils who had been taught by specialists presenting similar content in person rather than by the new media. It was therefore concluded that general elementary school teachers with no special training or experience in teaching a second language and with no previous knowledge of that language can with a minimum of daily preparation successfully guide their pupils in learning the language, provided that efficient use is made of the newer educational media. However, the level of achievement to be expected of the pupils in some aspects of language learning (e.g., immediacy and appropriateness of oral responses) will be relatively lower than that which might be reached if the pupils were taught the same content by well-qualified specialists.

#### **SUMMARY**

Research studies published since 1965 validate the addition of foreign languages to the elementary curriculum. Second language learning among young children, while causing no interference with achievement in the basic skills, promotes superior progress in high school language study and results in a significantly higher gain in mental maturity than that realized in the same period by non-FLES pupils.

Such instruction, according to other recent studies, should take place daily. It may be handled by the classroom teacher who efficiently incorporates the use of newer educational media, provided that the achievement level set for his pupils in at least one of the four linguistic skills is relatively lower than that anticipated if the same class were taught by a well-qualified specialist. Training in speaking skills should precede training in listening comprehension, which in turn is facilitated by physical involvement in the learning situation.

#### **FOOTNOTES**

- 1. "Public School Programs and Practices: Foreign Language Programs," NEA Research Bulletin, XLV (December 1967), 113.
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- 14. Evan R. Keisler, Carolyn Stern, and Lawrence Mace, "Sequence of Speaking and Listening Training in Beginning French: A Replication," American Educational Research Journal, III (May 1966), 169-178.
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- 16. James H. Humphrey, "Comparison of the Use of Active Games and Language Workbook Exercises as Learning Media in the Development of Language Understandings with Third Grade Children," Perceptual and Motor Skills, XXI (August 1965), 23-26.
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